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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,034	08/27/2001	Mikhail Boroditsky	ATT-027PUS	4894

22494 7590 02/08/2005

DALY, CROWLEY & MOFFORD, LLP  
SUITE 101  
275 TURNPIKE STREET  
CANTON, MA 02021-2310

EXAMINER
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PAYNE, DAVID C

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/940,034

Applicant(s)

BORODITSKY ET AL.

Examiner

David C. Payne

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2,3,8 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3,8 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2 July 2004.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. The indicated allowability of claims 2, 3, 8 and 9 is withdrawn in view of the newly discovered reference(s) to Zang, Kobayashi, and Jalali. Rejections based on the newly cited reference(s) follow.
2. Applicant's arguments with respect to claims 30 August 2004 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Zang, et al., "Photonic Slot Routing in All-Optical WDM Mesh Networks," Global Telecommunications Conference - Globecom'99, p.1449-1453 (Zang) in view of Kobayashi et al. JP 409214503A (Kobayashi) and Jalali et al. US 5,793,907 (Jalali).

Re claims 2 and 8, Zang disclosed

An optical packet-switched ring network/method (Figure 2).

a node including

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an optical switch (Figure 1) coupled to a fiber of the ring network;  
a transmit switch (Figure 1) coupled to the optical switch;  
a wavelength stacking assembly coupled to the transmit switch (Figure 1),  
a receive switch coupled to the optical switch;

Zang does not disclose

wherein the wavelength stacking assembly includes a tunable laser, a circulator coupled to the tunable laser, a demultiplexer coupled to the circulator followed by delay lines and a reflector;

Kobayashi disclosed

a circulator (7a-7n), a demultiplexer (1) coupled to the circulator followed by delay lines (30a – 30n) and a reflector (9a – 9n);

It would have been obvious to one of ordinary skill in the art at the time of invention to use the Kobayashi wavelength stacker in place of the Zang stacker since the reflectors in Kobayashi allow the signals to recirculate until transmitted to the output thereby extending the buffer time of the device.

Jalali disclosed an optical delay device that transmits a plurality of wavelengths via a tunable laser (30 of Figure 4). It would have been obvious to use a tunable laser in the Zang invention since tunable lasers allow one to transmit a plurality of wavelengths with one transmitter in a smaller footprint than using multiple transmitters and the associated power expense.

4. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zang, et al., "Photonic Slot Routing in All-Optical WDM Mesh Networks," Global

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Telecommunications Conference – Globecom'99, p.1449-1453 (Zang) in view of Kobayashi et al. JP 409214503A (Kobayashi).

Re claims 3 and 9, Zang disclosed

An optical packet-switched ring network/method (Figure 2).

a node including

an optical switch (Figure 1) coupled to a fiber of the ring network;

a transmit switch (Figure 1) coupled to the optical switch;

a wavelength unstacking assembly coupled to the transmit switch (Figure 1),

a receive switch coupled to the optical switch;

Zang does not disclose

wherein the wavelength unstacking assembly includes a, a circulator, a demultiplexer coupled to the circulator followed by delay lines and a reflector;

Kobayashi disclosed

a circulator (7a-7n), a demultiplexer (1) coupled to the circulator followed by delay lines (30a – 30n) and a reflector (9a – 9n);

It would have been obvious to one of ordinary skill in the art at the time of invention to use the Kobayashi wavelength stacker in place of the Zang stacker since the reflectors in Kobayashi allow the signals to recirculate until transmitted to the output thereby extending the buffer time of the device.

### ***Conclusion***

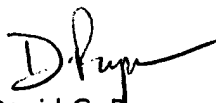
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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (571) 272-3024. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp



David C. Payne  
Patent Examiner  
AU 2633